Applicants: de Bont, et al. Serial No.: 10/590,860 Filing Date: April 23, 2007 Docket No.: 294-258 PCT/US

Page 3 of 9

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of claims:

1-11. (Cancelled)

- 12. (Currently Amended) A method for extracting <u>a</u> fermentation <u>hydrocarbon-containing-product selected from the group consisting of 4-hydroxybenzoic acid, benzaldehyde, a catechol, benzylalcohol, cinnamic acid, phenol, and mixtures thereof, from a fermentation liquid comprising:</u>
- (i) conducting a fermentation using a biocatalyst to form a <u>fermentation</u> hydrocarbon-containing product in a fermentation liquid;
- (ii) contacting the fermentation liquid with a solvent-impregnated porous carrier, wherein the solvent-impregnated porous carrier has a density different from the fermentation liquid and the <u>fermentation hydrocarbon-containing</u>-product is sorbed by the solvent-impregnated carrier; and
- (iii) separating the <u>fermentation hydrocarbon-containing</u> product from the solvent-impregnated porous carrier, wherein the fermentation product is selected from the group consisting of 4-hydroxybenzoic acid, benzaldehyde, a catechol, benzylalcohol, cinnamic acid, phenol, and mixtures thereof.
- 13. (Previously Presented) A method according to claim 12, wherein the separation is carried out by steam stripping, back-extraction, heating, or combinations thereof.
- 14. (Previously Presented) A method according to claim 12, wherein the solvent-impregnated porous carrier in step (iii) is recycled through to step (ii).
- 15. (Previously Presented) A method according to claim 12, wherein said solvent impregnated carrier comprises a polymeric carrier.

Applicants: de Bont, et al. Serial No.: 10/590,860 Filing Date: April 23, 2007 Docket No.: 294-258 PCT/US

Page 4 of 9

16. (Previously Presented) A method according to claim 15, wherein said polymeric carrier comprises one or more polystyrene, polypropylene, polytetrafluoroethylene, silicone, polyethylene, or regenerated cellulose group.

- 17. (Previously Presented) A method according to claim 16, wherein said polymeric carrier is crosslinked.
- 18. (Previously Presented) A method according to claim 12, wherein said solvent impregnated carrier comprises an inorganic carrier, preferably selected from silica, alumina, aluminosilicates, and combinations thereof.
- 19. (Currently Amended) A method according to claim 12, wherein said <u>fermentation</u> hydrocarbon-containing product is 4-hydroxybenzoic acid, <u>benzylalcohol</u>, 3-methylcatechol, benzaldehyde, <u>cinnamic acid</u>, or a-mixtures thereof.
- 20. (Previously Presented) A method according to claim 12, wherein said biocatalyst is selected from *Pseudomonas putida*, *Escherichia coli*, *Sacharomyces cerevisiae*, *Lactobacillus* species, or *Aspergillus niger*.
 - 21. (Previously Presented) A method according to claim 12, wherein
 - said solvent impregnated carrier is inserted at or near the bottom of a fermentor containing said fermentation liquid and is collected at or near the top of said fermentor, wherein said solvent impregnated carrier has a density that is lower than that of said fermentation liquid; or
 - said solvent impregnated carrier is inserted at or near the top of a fermentor containing said fermentation liquid and is collected at or near the bottom of said fermentor, wherein

Applicants: de Bont, et al. Serial No.: 10/590,860 Filing Date: April 23, 2007 Docket No.: 294-258 PCT/US

Page 5 of 9

said solvent impregnated carrier has a density that is higher than that of said fermentation liquid.

- 22. (Previously Presented) A method according to claim 12, which is carried out continuously.
- 23. (Previously Presented) A method according to claim 12, wherein said porous solvent impregnated carrier has an average pore diameter of from 2.5 nm to 50 μ m.
- 24. (Previously Presented) A method according to claim 12, wherein the porosity is from 30 to 80%.
- 25. (New) A method according to claim 12, wherein the catechol is 3-methylcatechol.